

# Too Much Email, Too Much Checking

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**Many people receive a lot of email and as a result they spend a considerable amount of time each day managing their inbox. Previous work has shown that different people adopt different strategies for dealing with email. However, there has been little work examining how the choice of email management strategy impacts the total time that one gives to email each day. In this position paper we briefly review the results of a study in which seven academics spent a week trying out different email management strategies: a once-a-day strategy and a frequent checking strategy. Results show that there are some benefits to not checking email throughout the day.**

*Email, habits, personal informatics.*

## 1. INTRODUCTION

Advances in technology have transformed the way that we communicate with each other. Email communication is widely used in business and academic institutions (Crystal, 2001). Beyond the context of work, people interact through social network sites. Coupled with this the advent of the smartphone and cheap mobile data plans has allowed people to stay online continually throughout the day.

As a result of these advances in our ability to stay online, many of our daily activities are now punctuated by habitual glances to check for important new messages in our inbox or to glance over our social network feed. For many these habitual checks occur throughout the day. Indeed, it has been well documented that some people keep their email visible throughout their working day in the office (Venolia, Dabbish, Cadiz, & Gupta, 2001). At the end of the working day, many return home and sit on the couch doing email (Stawarz, Cox, Bird, & Benedyk, 2013). Some even like to end their day by taking their tablet computer to bed with them for one last quick check of the inbox before turning the lights out (Müller, Gove, and Webb, 2012). There is another way, however.

In this position paper, we outline some of our recent work on getting people to adopt different email checking strategies. In this study, Bradley, Brumby, Cox and Bird (submitted) asked people to try and adopt either a once-a-day checking strategy or a frequent checking strategy for a week at a time. The intention of doing this was to find out how people would react to trying out such radically different email management strategies and whether

there would be any difference in how they actually spent their time on email applications.

## 2. EMAIL CHECKING STUDY

Many people are overloaded by the amount of email they receive. Because of this, a considerable amount of time can be spent each and every day managing one's inbox. For some this is a significant source of stress (Barley, Meyerson, & Grodal, 2011). Moreover, the time spent managing email can be distracting and impact negatively on other important activities (Boswell & Olsen-Buchanan, 2007). Previous work has examined how people deal with email, showing that different people adopt remarkably different strategies for managing their inbox. In the seminal work in this area, Whittaker and Sidner (1996) found that people could be defined as: "no filers", people who never managed their inbox; "frequent filers", people who manage their inbox daily; or "spring cleaners", people who manage their inbox intermittently. While it is evident that there are individual differences in how people choose to manage their inbox, there has been a surprising lack of work that has attempted to empirically determine which of these strategies is best.

In our recent study, Bradley, Brumby, Cox, & Bird (submitted) examined people's reactions to trying to adopt different email management strategies and how changes in email management strategy impacted on the total time given over to email activities throughout the day. By recording the amount of time people spend on email using different strategies, we attempt to identify which strategy is the most efficient. We assume that the

most efficient strategy is the one that requires users to spend the least amount of time in order to manage their email inbox. The two email management strategies that we investigate are modifications of the “frequent filing” and “spring cleaning” strategies.

Bradley et al. recruited university academics as participants because they tend to receive a high volume of email everyday. Each participant was asked to spend a week as a frequent checker and a week as once a day checker. As frequent checkers, participants were asked to try and process email (by responding, filing or deleting it) throughout the day. As once a day checkers, participants were asked to try and leave as much of their email processing as possible to single session each day.

In order to assess how these different instructions affected actual email checking behaviour we used a commercially available logging software tool, called Rescue Time ([www.rescuetime.com](http://www.rescuetime.com)). This software runs in the background on the participant's computer, and detects which application the user is interacting with. It was possible to configure Rescue Time so that it allowed the researcher to log the periods of time that participants were interacting with email applications or services.

Analysis of these usage logs revealed that the participants in our study were able to change their email checking behaviour based on the instructions given. In particular, when following the ‘once a day’ strategy participants made fewer visits to email applications ( $M = 3.6$  sessions per day) than when adopting the frequent checking strategy ( $M = 8$  sessions per day).

Given that our participants were able to change the frequency with which they accessed email applications we next wanted to know how this impacted on how much time they spent on email. First, we consider the average duration of each email ‘session’ – that is, each distinct visit to an email application. As might be expected, email sessions were longer when participants were adhering to the once a day strategy ( $M = 355s$ ,  $SD = 216s$ ) than when following the frequent checking strategy ( $M = 273s$ ,  $SD = 71s$ ),  $t(6)=2.391$ ,  $p=.05$ .

In terms of scaling up to the total time spent on email during the course of the entire week, there was some indication that participants tended to spend less time on email when using the once a day strategy ( $M = 148$  minutes per week,  $SD = 109$ ) compared to the frequent checking strategy ( $M = 257$  minutes per week,  $SD = 238$ ). This difference was not statistically significant, however,  $t(6) = 2.09$   $p = 0.08$ .

### 3. DISCUSSION

Many people spend a lot of time habitually checking their email inbox throughout the day. The results of our initial work offer some support to the idea that trying to consolidate email activity into fewer, longer session each day may be beneficial in terms of productivity. We would like to discuss with colleagues at this workshop how this initial exploration in this area might be developed further. One issue that strikes us is how key barriers that would inhibit people from adopting a once a day checking strategy might be overcome. For instance, in some instances responding to emails quickly can be very important. To address this issue we have also been looking at how people use inbox level cues (such as sender and subject line information) to decide how quickly to respond to a message (if at all). We hope to discuss this related ‘work in progress’ at the workshop to gain valuable feedback from colleagues. Moreover, we think that understanding and improving email behaviour is a valuable topic for discussion at this workshop.

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